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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,621	02/01/2001	Katsumi Kanehira	202686US2TTC	8152

22850 7590 10/23/2002

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EXAMINER

LAU, TUNG S

ART UNIT	PAPER NUMBER
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2863

DATE MAILED: 10/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/774,621

Applicant(s)

KANEHIRA ET AL.

Examiner

Tung S Lau

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9, 13, 17-23, 28-31, 36 and 37 is/are rejected.
- 7) ☒ Claim(s) 5, 10-12, 14-16, 24-27 and 32-35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s): _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

a. Claims 1, 2, 3, 4, 6-9, 13, 17-23, 28-31, 36 and 37 are rejected under 35

U.S.C. 103(a) as being unpatentable over Iwai et al. (U.S. Patent 4,866,393) in view of Kondou et al. (U.S. Patent 5,221,893).

Iwai discloses deterioration diagnosis method of calculate the corrosion loss/contamination level of metal to expose days under atmospheric condition as function of environment (col. 1, lines 34-45, col. 3, lines 11-47, col. 9, lines 3-16)), using temperature as environmental variable (col. 1-2, lines 45-3), deterioration/ contamination calculation (col. 2-3, Lines 55-2), computer readable medium (fig. 1-3), under atmospheric condition (col. 1, lines 34-45)

Iwai does not diagnose the life span of the metal on corrosion speed on graphical output results.

Kondou discloses such application (fig. 2, 3, 4) in order to calculate the useful life of the metal.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Iwai to have the diagnose the life span of the metal on corrosion speed on graphical output results taught by Kondou in order to calculate the useful life of the affected material.

Iwai does not specifically disclose humidity, corrosive gas, sea salt particles or distance from the coast, but Iwai talk about the affects from the atmospheric condition on metals (col. 9, lines 3-16), it would have been inherent to one of ordinary skill in the art at the time the invention was made to know that environmental factor does include humidity, corrosive gas, sea salt particles or distance from the coast.

Allowable Subject Matter

3. Claims 5, 10, 11, 12, 14, 15, 16, 24, 25, 26, 27, 32-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including ~~all of the limitations of the base claim and any~~ intervening claims.

The following is an examiner's statement of reasons for allowance: Prior art fail to ~~show the calculate the corrosion using filter paper method, gas absorbed, metal~~ is copper, using linear expression of a square root calculation, deterioration

index, use on silver, electronic circuit and wiring, use of anions, chlorine, ions, nitrate ions, sulfate ions chemical material, use vibration rate, wire breaking time of pattern and insulation resistance of conductors.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 703-305-3309. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 703-308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5841 for regular communications and 703-308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

TC2800 RightFAX Telephone Numbers : TC2800 Official Before-Final RightFAX - (703) 872-9318, TC2800 Official After-Final RightFAX - (703) 872-9319

TC2800 Customer Service RightFAX - (703) 872-9317

TL October 1, 2002


JOHN S. HILTEN
SUPERVISORY PATENT EXAMINER
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